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| APPLICATION NO.              | FILING DATE            | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------|------------------------|----------------------|---------------------|------------------|
| 10/643,260                   | 08/19/2003             | Michael J. Galanis   | 091488-9005         | 4658             |
| 1131                         | 7590 07/26/2004        | EXAMINER             |                     |                  |
| MICHAEL BEST & FRIEDRICH LLC |                        |                      | NGUYEN, KIM T       |                  |
| SUITE 1700                   | MICHIGAN AVENUE        |                      | ART UNIT            | PAPER NUMBER     |
| CHICAGO,                     | CHICAGO, IL 60611-4212 |                      | 3713                |                  |

DATE MAILED: 07/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.   | Applicant(s)   |  |  |  |
|---|---|--|--|--|--|
|   | 10/643,260  | GALANIS ET AL.   |  |  |  |
| Office Action Summary   | Examiner  | Art Unit   |  |  |  |
|   | Kim Nguyen  | 3713   |  |  |  |
| The MAILING DATE of this communication ap<br>Period for Reply   | ppears on the cover sheet with t  | he correspondence address  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REP  | LY IS SET TO EXPIRE 3 MON   | TH(S) FROM   |  |  |  |
| THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a re  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, may a reply ply within the statutory minimum of thirty (30 d will apply and will expire SIX (6) MONTHS tte, cause the application to become ABAND | be timely filed  O) days will be considered timely. From the mailing date of this communication.  DONED (35 U.S.C. § 133). |  |  |  |
| Status  |   |  |  |  |  |
| 1) Responsive to communication(s) filed on 16   | January 2004.   |  |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Th  |   |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |   |  |  |  |  |
| closed in accordance with the practice under  | Ex parte Quayle, 1935 C.D. 1  | 1, 453 O.G. 213.   |  |  |  |
| Disposition of Claims   |   | ·  |  |  |  |
| 4) Claim(s) 1-18 is/are pending in the applicatio   | n.  |  |  |  |  |
| 4a) Of the above claim(s) is/are withdr   | awn from consideration.   |  |  |  |  |
| 5) Claim(s) is/are allowed.   |   |  |  |  |  |
| 6)⊠ Claim(s) <u>1-18</u> is/are rejected.   |   |  |  |  |  |
| 7) Claim(s) is/are objected to.   |   |  |  |  |  |
| 8) Claim(s) are subject to restriction and  | or election requirement.  | •  |  |  |  |
| Application Papers  |   |  |  |  |  |
| 9)☐ The specification is objected to by the Examir  | ner.  |  |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  |   |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |  |  |  |  |
| Replacement drawing sheet(s) including the corre  |   |  |  |  |  |
| 11)☐ The oath or declaration is objected to by the £  | Examiner. Note the attached O   | mice Action or form P1O-152.   |  |  |  |
| Priority under 35 U.S.C. § 119  |   |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreig  | n priority under 35 U.S.C. § 11   | 19(a)-(d) or (f).  |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:  |   |  |  |  |  |
| 1. Certified copies of the priority docume  | nts have been received.   |  |  |  |  |
| 2. Certified copies of the priority docume  |   |  |  |  |  |
| 3. Copies of the certified copies of the pri  | -   | ceived in this National Stage  |  |  |  |
| application from the International Bure   | * **  | aniund   |  |  |  |
| * See the attached detailed Office action for a lis   | s. or the certified copies not rec  | serveu.  |  |  |  |
|   |   |  |  |  |  |
| Attachment(s)   | A) [7] 1_1: 5   | mon/(PTO 412)  |  |  |  |
| 1) Motice of References Cited (PTO-892) 2) D Notice of Draftsperson's Patent Drawing Review (PTO-948)   |   | lail Date  |  |  |  |
| Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No/s)/Mail Date 1/16/04.  | 8) 5) Notice of Inform<br>6) Other:   | mal Patent Application (PTO-152)   |  |  |  |

Art Unit: 3713

#### **DETAILED ACTION**

The preliminary amendment filed January 16, 2004 has been received and considered. By this amendment, claims 1-18 are now pending in the application.

## Specification

The abstract should be within the range of 50 to 150 words.

## Claim Objections

- 1. Claims 1-18 are objected to because of the following informalities:
- a) In claim 1, line 8, and claim 15, line 11, the claimed limitation "filtered signal" should be corrected to "the filtered signals".
- b) In claim 1, line 10; claim 9, lines 11-12, claim 12, lines 11-12; and claim 15, line 13, the claimed limitation "club face alignment" should be corrected to "said club face alignment".
- c) In claims 2-8, 10-11, 13-14, and 16-18, line 1, the claimed limitation "<u>device</u>" should be corrected to "<u>golf club</u>".
- d) In claim 2, line 1, the claimed limitation "<u>microprocessor</u>" should be corrected to "<u>processing means</u>".
- e) In claim 12, line 5, the claimed limitation "<u>receiving</u>" should be corrected to "<u>receive</u>".
- f) In claim 15, line 6, the claimed limitation "<u>the</u> bias current" should be corrected to "bias current".

Art Unit: 3713

g) In claim 15, line 12, the claimed limitation "<u>the</u> club face alignment" should be corrected to "<u>a</u> club face alignment".

Appropriate correction is required.

#### Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 3. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- a) In claim 1, line 10, the claimed limitation "and for activating" is inaccurate because it is not a component (a means) that construct to the golf club.
- b) In claim 3, lines 1-2, the claimed limitation "a signal" is ambiguous. It is not clear if the "signal" refers to the "infrared signals" in claim 1, line 5, or the "direct current signals" in claim 1, line 6, or the "filtered signals" in claim 1, line 8.
- c) In claim 9, line 10, the claimed limitation "signals" is ambiguous. It is not clear if the "signals" refers to the "infrared signals" in claim 9, line 5, or the "signals" in claim 9, line 6, or the "direct current signals" in claim 9, line 8.
- d) In claim 12, line 10, the claimed limitation "signals" is ambiguous. Refer to the explanation in claim 9 above.
- e) Other claims are rejected as being dependent on the rejected base claim.

Art Unit: 3713

## Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed.

Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3-13 of U.S. Patent No. 6,736,735. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1 and 3-14 disclose the same subject matter taught in claims 1 and 3-13 of patent '735 in broader scope by eliminating the infrared source pulsed at a rate of 2-6 KHZ. Further, as to claims 2 and 15-18, using a regulator for regulating sources or sensors and using phototransistor sensors would have been well known to a person of ordinary skill in the art at the time the invention was made.

## Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3713

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 6. Claims 1-4, 6, 8, and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogden (US patent No. 5,374,063) in view of Henwood (US patent No. 5,792,001) and Ognjanovic (US patent No. 6,248,021).
- a. As per claim 1, 3, and 6, Ogden discloses a golf club comprising a club head, sensors, and a means for activating indicators to indicate the club face alignment (Fig. 4). Ogden does not disclose a filter means and a processing means. However, Henwood discloses including a filter means for blocking unwanted signals (col. 7, lines 39-66), and Ognjanovic discloses implementing a processing means in the club head (col. 2, lines 48-63). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement the filter means of Henwood and the processing means of Ognjanovic to the club head of Ogden in order to facilitate filtering out unwanted signals and to facilitate processing data of the golf club.
- b. As per claim 2 and 8, activating indicators for a predetermined period of time, and using a capacitor as an additional power source to a sensor would have been well known to a person of ordinary skill in the art at the time the invention was made.
- c. As per claim 4, Henwood discloses a sounder impact sensor (col. 8, lines 5-7).
- d. As per claim 15, refer to discussion in claim 1 above. Further, Ognjanovic discloses using a regulator for regulating voltages (col. 6, lines 66-67; col. 7, lines 1-3; and col. 10, lines 19-23).

Art Unit: 3713

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement regulators of Ognjanovic to the golf club of Ogden in order to regulate voltages and currents of the infrared sensors to maintain stability operation for the sensors of Ogden.

- e. As per claim 16, Ogden discloses phototransistor sensors (col. 4, lines 3-13).
- f. As per claim 17-18, refer to discussion in claim 15 above.

#### Allowable Subject Matter

- 7. Claims 5 and 7 would be allowable if rewritten to overcome the objections, the rejections under 35 U.S.C. 112, second paragraph, and if a terminal disclaimer is filed in compliance with 37 CFR 1.321(c) to overcome the double patenting rejection, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
- 8. Claims 9-14 would be allowable if rewritten or amended to overcome the objections, the rejections under 35 U.S.C. 112, second paragraph, and if a terminal disclaimer is filed in compliance with 37 CFR 1.321(c) ) to overcome the double patenting rejection, set forth in this Office action.
- 9. The following is a statement of reasons for the indication of allowable subject matter:

Prior arts of record does not disclose a club face including a plurality of infrared sources in which the infrared sources are pulsed at a rate of 2-6 kilohertz set forth in claim 5, or at a rate of 4 kilohertz set forth in claim 7; the feature of pulsing the infrared sources at the rate of 4

Art Unit: 3713

kilohertz or at the rate of 2-6 kilohertz are used in the golf club set forth in the independent claims 9 and 12.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim Nguyen whose telephone number is (703) 308-7915. The examiner can normally be reached on Monday-Thursday from 8:30AM to 5:00PM ET.

The central official fax number is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1148.

Kim Nguyen Primary Examiner

Art Unit 3713

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Date: July 23, 2004